

# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2021 NISSAN Sentra SE-R Service and Repair Manual

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# **CAN COMMUNICATION**

- CAN communication is a multiplex communication system. This enables the system to transmit and receive large quantities of data at high speed by connecting control units with 2 communication lines.
- CAN communication lines adopt twisted-pair line style (two lines twisted) for noise immunity.

# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition		
	87	CAN communication error (brakecontrol unit)	Diagnosis condition	When vehicle is READY	
			Signal (terminal)	CAN communication signal	
U2148			Threshold	If distance sensor is not transmitting or receiving CAN communication signal	
			Diagnosis delay time	2 seconds or more	

### **POSSIBLE CAUSE**

CAN communication system

#### **FAIL-SAFE**

The following systems are canceled.

- Vehicle-to-vehicle distance control mode\*1
- Conventional (fixed speed) cruise control mode\*1
- Steering wheel assistance function\*1
- Vehicle speed & vehicle-to-vehicle control function\*2
- Lane keep function\*2,3
- Lane keep function\*2,4
- Lane change support function\*2
- Overtaking support function\*2
- Route driving support function\*2
- AEB
- RAB
- I-FCW
- \*1: With ProPILOT Assist, Without ProPILOT Assist 2.0
- \*2: With ProPILOT Assist 2.0
- \*3: ProPILOT Assist 2.0 display is green

# **CONFIRMATION PROCEDURE**

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U2148-87" is detected as the current malfunction in "Self Diagnostic Result" of "LASER/RADAR".

<u>Is "U2148-87" detected as the current malfunction?</u>

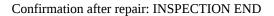
YES >>

Refer to DTC Diagnosis Procedure.

NO-1 >>

To check malfunction symptom before repair:Refer to Intermittent Incident.

NO-2 >>



## 1. PERFORM THE SELF-DIAGNOSIS

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U2148-87" is detected as the current malfunction in "Self Diagnostic Result" of "LASER/RADAR".

#### <u>Is "U2148-87" detected as the current malfunction?</u>

YES >>

Refer to Trouble Diagnosis Flow Chart.

NO >>

INSPECTION END



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# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition		
	87	CAN communication error (BCM)	Diagnosis condition	When vehicle is READY	
			Signal (terminal)	CAN communication signal	
U214F			Threshold	If distance sensor is not transmitting or receiving CAN communication signal	
			Diagnosis delay time	2 seconds or more	

### **POSSIBLE CAUSE**

CAN communication system

#### **FAIL-SAFE**

The following systems are canceled.

- Vehicle-to-vehicle distance control mode\*1
- Conventional (fixed speed) cruise control mode\*1
- Steering wheel assistance function\*1
- Vehicle speed & vehicle-to-vehicle control function\*2
- Lane keep function\*2,3
- Lane keep function\*2,4
- Lane change support function\*2
- Overtaking support function\*2
- Route driving support function\*2
- AEB
- RAB
- I-FCW
- \*1: With ProPILOT Assist, Without ProPILOT Assist 2.0
- \*2: With ProPILOT Assist 2.0
- \*3: ProPILOT Assist 2.0 display is green

# **CONFIRMATION PROCEDURE**

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U214F-87" is detected as the current malfunction in "Self Diagnostic Result" of "LASER/RADAR".

#### <u>Is "U214F-87" detected as the current malfunction?</u>

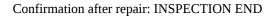
YES >>

Refer to DTC Diagnosis Procedure.

NO-1 >>

To check malfunction symptom before repair:Refer to Intermittent Incident.

NO-2 >>



## 1. PERFORM THE SELF-DIAGNOSIS

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U214F-87" is detected as the current malfunction in "Self Diagnostic Result" of "LASER/RADAR".

#### <u>Is "U214F-87" detected as the current malfunction?</u>

YES >>

Refer to Trouble Diagnosis Flow Chart.

NO >>

INSPECTION END



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- CAN communication is a multiplex communication system. This enables the system to transmit and receive large quantities of data at high speed by connecting control units with 2 communication lines.
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# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition		
	87	CAN communication error (ADAS control unit)	Diagnosis condition	When vehicle is READY	
			Signal (terminal)	CAN communication signal	
U2152			Threshold	If distance sensor is not transmitting or receiving CAN communication signal	
			Diagnosis delay time	2 seconds or more	

### **POSSIBLE CAUSE**

CAN communication system

#### **FAIL-SAFE**

The following systems are canceled.

- Vehicle-to-vehicle distance control mode\*1
- Conventional (fixed speed) cruise control mode\*1
- Steering wheel assistance function\*1
- Vehicle speed & vehicle-to-vehicle control function\*2
- Lane keep function\*2,3
- Lane keep function\*2,4
- Lane change support function\*2
- Overtaking support function\*2
- Route driving support function\*2
- AEB
- RAB
- I-FCW
- \*1: With ProPILOT Assist, Without ProPILOT Assist 2.0
- \*2: With ProPILOT Assist 2.0
- \*3: ProPILOT Assist 2.0 display is green

# **CONFIRMATION PROCEDURE**

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U2152-87" is detected as the current malfunction in "Self Diagnostic Result" of "LASER/RADAR".

<u>Is "U2152-87" detected as the current malfunction?</u>

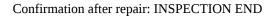
YES >>

Refer to DTC Diagnosis Procedure.

NO-1 >>

To check malfunction symptom before repair:Refer to Intermittent Incident.

NO-2 >>



## 1. PERFORM THE SELF-DIAGNOSIS

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U2152-87" is detected as the current malfunction in "Self Diagnostic Result" of "LASER/RADAR".

#### <u>Is "U2152-87" detected as the current malfunction?</u>

YES >>

Refer to Trouble Diagnosis Flow Chart.

NO >>

INSPECTION END

